

THE PRE-ISLAMIC SOUTH  
ARABIAN BRONZE HORSE IN THE  
DUMBARTON OAKS COLLECTION

JACQUES RYCKMANS

WITH TECHNICAL REMARKS

by

I. VANDEVIVERE

DURING a stay in December 1972 at the Center for Byzantine Studies of Dumbarton Oaks,<sup>1</sup> I had the opportunity to study the South Arabian bronze horse displayed in the Collection.<sup>2</sup> This investigation, aided by a number of photographs, by data from a chemical analysis of the bronze, and by the useful remarks of my colleague in Louvain, Professor I. Vandevivere, enabled me to clarify some of the problems related to this remarkable piece of sculpture<sup>3</sup> which Father A. Jamme<sup>4</sup> published twenty years ago.

The horse, which is said to have come from a site south of Sanaa, Yemen, is about half life-size, and was first reported in fragments, about 1929, in Cairo. The more than eighty fragments were eventually assembled by an art dealer in New York, and in 1938 the horse was purchased for the Dumbarton Oaks Collection. The horse is rearing and bears a saddle cloth and a band in relief around the belly, as well as a collar of which the central part across the chest, which was separate, is missing. There is a large hole of regular shape in the middle of the saddle cloth. The tail and the tongue are missing, and so are the eyes, which originally must have been inlaid.<sup>5</sup> A stylized forelock adorns the forehead.

Three inscriptions appear on the horse. Inscription A, engraved on the left shoulder, ten lines long but badly mutilated, mentions the offering of two horses with their *rkb* (either "saddle" or "rider"). Inscription B, consisting of four letters in raised relief, appears on the area of the saddle blanket, near inscription A. Inscription C, which gives the name of a man, is engraved on the left side of the rump.

The dating of the horse and its connection with that of the inscriptions has given rise to divergent views, which are here briefly summarized.

In a paper of 1954, Jacqueline Pirenne regards the lettering of inscription B as archaic (fifth century B.C.).<sup>6</sup> As the text is in relief, she assumes that it was

<sup>1</sup> I am very grateful to Prof. William C. Loerke, Director of Studies, for the hospitality I received at Dumbarton Oaks, and to Mrs. Elizabeth Bland, Associate Curator, and Miss Susan Boyd, Assistant Curator, for their unlimited help as well as for the rich photographic documentation they graciously put at my disposal.

<sup>2</sup> Accession no. D.O. 38.12. A description and first bibliography are given in Gisela M. A. Richter, *Catalogue of Greek and Roman Antiquities in the Dumbarton Oaks Collection* (Cambridge, Mass., 1956), 26–28 and pl. x. The statue is further mentioned as no. 14 in the *Handbook of the Byzantine Collection, Dumbarton Oaks* (Washington, D.C., 1967), 4–5.

<sup>3</sup> In my article "Notes sur le cheval de bronze de Dumbarton Oaks," *Revue des Archéologues et Historiens d'Art de Louvain*, 6 (1973), 38–74, the contents of which are summarized in the present article.

<sup>4</sup> "Inscriptions on the Sabaeen Bronze Horse of the Dumbarton Oaks Collection," *DOP*, 8 (1954), 317–30, figs. 37–42. Jamme makes no mention of a very careful copy of the texts made by Miss Florence Day in July 1947, a photostat of which exists in the dossier on the horse, from which he must have borrowed the designations "A, B, C" for the inscriptions. A copy was sent in 1947, along with photographs, to Professor G. Ryckmans, who quite rightly considered them insufficient for publication without his first seeing the original.

<sup>5</sup> Inlaid eyes are partly preserved in a bronze lion's head from ancient South Arabia; see H. St. J. B. Philby, *Arabian Highlands* (Ithaca, New York, 1952), fig. 25.

<sup>6</sup> "La Grèce et Saba, Une nouvelle base pour la chronologie sud-arabe," *Extrait des Mémoires présentés par divers savants à l'Académie des Inscriptions et Belles-Lettres*, 15 (1955), 89–196, esp. 151–53 for the Dumbarton Oaks horse.

cast with the horse, which must have belonged to a locally manufactured equestrian statue. The lively and plastic forms and certain details remind her of Greek art, especially in some of its orientalizing forms. She therefore believes that the horse is directly influenced by Greek sculpture, in particular by that of the early fifth century B.C. Inscriptions A and C, obviously later in date, are connected with later reuses of the horse.

In his first publication of the horse and its inscriptions, which I mentioned above, A. Jamme considers the horse as well as all three texts to be of the same date. He states that the only possible restoration of the name of the god to whom the statue is offered, which is found in inscription A, is *[Rḥm]n[n]*, "Raḥmānān," the name of God found in Christian South Arabian inscriptions from the end of the fourth century A.D. onward. Dated parallels to the lettering of inscription C point more precisely, for the manufacture of the horse, to a date between the end of the fifth and the beginning of the sixth centuries A.D.<sup>7</sup> While C is the signature of the engraver of text A, B must be that of the sculptor. Jamme translates inscription A as mentioning the offering of "two horses and their *saddles*." The presence of a second horse forming a pair with the extant one would explain the latter's posture leaning toward the right.

Miss Pirenne in a later paper retained her previous interpretation.<sup>8</sup> In her opinion, the great differences between the lettering of the three texts—B archaic and C quite late—make it absolutely impossible to assign them to the same date. She rejects as entirely arbitrary the restoration of the name Raḥmānān in inscription A<sup>9</sup> and, consequently, the late date attributed to the statue and to inscription B. The latter belongs with the casting of the statue. Text A must have been added when the statue was reoffered, after having been removed as booty from its original location at the time of the fall of the kingdom of Qatabān in the first century A.D.<sup>10</sup> The lettering of inscription C points to a date around A.D. 425; this text was engraved when the statue was stolen in the monotheistic period from the pagan temple to which it had been donated.

After a new examination of the horse, Jamme remarks that the tracing of inscription A is identical with that of the ornamentation of the harness, which

<sup>7</sup> "Inscriptions," 329–30. The restoration and dating have been uncritically accepted by Gisela Richter, *Catalogue*, 26, 28; M. Höfner, in *AOJ*, 17 (1956), 468; H. von Roques de Maumont, *Antike Reiterstandbilder* (Berlin, 1958), 72–75; W. F. Albright, quoted in A. Jamme, "Note on the Dating of the Bronze Horse of the Dumbarton Oaks Collection" (Washington, D.C., 1957) (mimeographed copy of a typescript), 10; and A. Grohmann, "Arabien," in *HAW* (Munich, 1963), 236.

<sup>8</sup> *Paléographie des inscriptions sud-arabes, Contribution à la chronologie et à l'histoire de l'Arabie du Sud antique*. I, *Des origines jusqu'à l'époque himyarite*, Verhandelingen van de Koninklijke Vlaamse Academie voor Wetenschappen, Letteren en Schone Kunsten van België, Klasse der Letteren, XXVI (Brussels, 1956), 268–72.

<sup>9</sup> See also J.-M. Solá Solá, "La inscripción Gl. 389 y los comienzos del monoteísmo en Sudarabia," *Le Muséon*, 72 (1959), 201 note 14. Moreover, Jamme restores as *mhrm*, "a temple," the designation of the building (i.e., church) in which the statue allegedly was offered to the Christian God. Two words for "church" are known in Old South Arabian: *qls* (*qalīs*, from the Greek) and *b't* (*bī'at* from the Syriac).

<sup>10</sup> The date of this event—and consequently also that of inscription A—was later advanced by Miss Pirenne to the 3rd century A.D. in her monograph, *Le royaume sud-arabe de Qatabān et sa datation, d'après l'archéologie et les sources classiques jusqu'au "Périple de la Mer Erythrée," Bibliothèque du Muséon*, XLVIII (Louvain, 1961), table at end of the volume.

must have been cast.<sup>11</sup> Inscription A, therefore, was cast with the statue and cannot have been added later. Inscription B turns out to be on a patch of extraneous bronze, soldered into the statue to fill up a hole, and has no connection with the date of the statue. Jamme insists that, since there is no trace of a rider, nor rein, nor bit, and since the mouth of the horse is in a state of perfect preservation, one must consider this bronze to represent just a horse rather than being part of an equestrian statue.

In a study of antique equestrian statues, H. v. Roques de Maumont remarks that the rearing position and the folds at the corners of the lips of the Dumbarton Oaks horse can be explained only by the presence of a rider.<sup>12</sup> He considers the statue to be a late work, not earlier than the fifth century A.D., erected in Syria in honor of an emperor; and he supposes—rather unconvincingly—that it was later taken as booty to South Arabia, where it was offered to the Christian God. . . .

My own position on these questions was stated in a study on the appearance of the horse in Arabia in general and in South Arabia in particular.<sup>13</sup> The dates assigned to the bronze horse—fifth century B.C. or fifth-sixth centuries A.D.—are both untenable. Inscription B cannot be used to date the horse, because originally it did not belong to it. The equestrian statue ultimately derives from Greek models, but some of Miss Pirenne's arguments in favor of an early date are founded on a questionable restoration. Equestrian *statues* disappeared in Greek sculpture from the sixth until the early fifth century B.C.,<sup>14</sup> and, therefore, there could not have been a Greek model for this horse in the early fifth century. The restoration of the name Raḥmānān is rightly rejected by Miss Pirenne. Furthermore, horses are not attested in South Arabia before the early second century A.D. My own dating for the casting of the statue and for its dedication—late second century A.D.<sup>15</sup>—took this and other internal and palaeographical evidence into consideration. Inscription C, unanimously considered late, must have been added at the time the statue was reused.

#### GENERAL ASPECT OF THE HORSE

The stylized aspect of the head strikes one immediately.<sup>16</sup> As my colleague I. Vandevivere says, "It is in the head that one can best observe the remarkable quality of the forms in this horse and the skill of the casting technique." To explain the apparent discrepancy between the stylization of the head and the naturalistic and plastic rendering of shoulders and rump, one must keep in mind the deficiencies of the restoration. Vandevivere further

<sup>11</sup> "Note," 1–11, esp. 6. On p. 10, W. F. Albright is quoted as agreeing entirely with the contents of this "Note."

<sup>12</sup> *Antike Reiterstandbilder*, 72–75.

<sup>13</sup> "L'apparition du cheval en Arabie ancienne," *Jaarbericht . . . "Ex Oriente Lux,"* 17 (1963) (Leiden, 1964), 211–26, especially 214–20.

<sup>14</sup> Von Roques de Maumont, *op. cit.*, 12–14.

<sup>15</sup> "L'apparition du cheval," 219.

<sup>16</sup> Cf. von Roques de Maumont, *op. cit.*, 73.

remarks that "a general survey of the surface shows differences in color that have no relation to the forms. It is clear that the surface was cleaned in much too radical a way in various areas, while elsewhere a false patina conceals the inaccuracies in the assembling of the fragments. But, above all, in many places the restorer has straightened out the distorted fragments, thus considerably altering the original shape of certain parts. This is especially true for the rump and the base of the neck where the surface has irregular depressions, in contrast to the taut appearance of the intact parts, for instance, the head.<sup>17</sup>"

#### AN EQUESTRIAN STATUE

The suggestion, already proposed by M. Höfner, that this is an equestrian statue<sup>18</sup> is confirmed by various observations. The rounded form of the corners of the mouth (fig. 1), in which a cylinder with a diameter of about 18 mm. would fit exactly, points to the original presence of a bit. The axis of this imaginary cylinder is directed slightly downward and backward to the right. Such a position of the bit would indeed be expected if a rider were holding the reins in his right hand, at a level lower than the mouth of the rearing horse. The tongue has disappeared, probably because it was attached to the bit. The palate is still in place.

Both ears are drawn backward: the animal evidently is represented as listening to the commands of its rider.<sup>19</sup> Had the horse been only saddled instead of mounted, it is not clear how the saddle could have been kept in place, since the girth is attached only to the saddle cloth. Besides, there is no technical reason for casting separately an element of such moderate thickness as a saddle.

On the other hand, the presence of a rider readily accounts for a number of details. The reins, which crossed the withers, would have concealed the joint between the forequarters and neck that are cast separately: this is why the artist did not bother to hide the joint in some other way. Similarly, the joint between the fore- and the hindquarters, running from the edge of the central opening to the lower border of the saddle cloth, would have been concealed by the legs and garments of the rider. These would have covered also most of the saddle cloth, and for this reason inscription A was placed on the shoulder instead of on the flatter and more appropriate surface of the saddle cloth.

Finally, the irregular holes at nearly symmetrical points left and right in the saddle cloth (the left hole is now filled by inscription B) may indicate the location of the rivets anchoring the rider to the horse.<sup>20</sup>

<sup>17</sup> Personal communication.

<sup>18</sup> Höfner, *op. cit.* (*supra*, note 7), 468.

<sup>19</sup> Compare, for instance, Chr. Boubé-Piccot, *Les bronzes antiques du Maroc*. I, *La statuaire*, Etudes et travaux d'archéologie marocaine, IV (Rabat, 1969), *Texte*, 172-76, *Planches*, nos. 108-12: bronze horse from Volubilis, the left ear of which is directed backward, the right one forward, a feature "linked to Greek tradition" (*Texte*, 175).

<sup>20</sup> I have no ready explanation for two almost symmetrical flat areas nearly 5 cm. long on the lower borders of the saddle cloth, on the right and on the left side, a few centimeters behind the joint of the girth.

## THE ATTITUDE OF THE EQUESTRIAN STATUE

A. Jamme has asserted that the collar is interrupted on the right side at the point where the horse was attached to its companion.<sup>21</sup> But this is not so: on both sides, at the end of the collar straps cast in relief, the broken fragment of a buckle, which secured the now missing front of the collar, is still visible. Had the two horses been attached side by side to form a team, some traces would have been left in the harness. Further, how could one explain the presence of a saddle, without a bit or a rider? Moreover, the wild landscape of Yemen, and the existence of high roads sometimes graded by steps in the pre-Islamic period, exclude the use of chariots in the interior of the country.

As a matter of fact, the horse is *not*, properly speaking, leaning toward the right. More precisely, the opening in its forequarters, into which the head and neck were inserted, is off center in relation to the strictly frontal symmetry of the forequarters. The neck and head are thus attached somewhat to the right of the plane of symmetry of the body (fig. 2). Such a strange, but unmistakably original, position<sup>22</sup> must be explained by the attitude of the rider and by the respective position of two equestrian statues forming a pair.

The attitude of the rider cannot be restored with certainty. I think it was most probably similar to that of several Hellenistic and Roman equestrian statues said to represent Alexander the Great, in particular the well-known one from Herculaneum, in the National Museum in Naples:<sup>23</sup> the rider, mounted on a rearing horse, is meant to be viewed from his right side. Holding the reins in his left hand, he is turned toward the right, his right arm, which probably held a weapon, drawn backward, as is also his right leg, the heel touching the thigh of the horse. In the case of our statue, clearly made to be viewed from its left side, the position would of course be reversed. This reconstruction is consistent with the presumed position of the bit, but it implies that the rider held the reins in his right hand and the weapon in his *left*. This last detail seems, of course, rather strange;<sup>24</sup> however, I think it can readily be explained by a concern for strict symmetry if we suppose that the two riders were facing each other against a wall, on both sides of a door or of a central object. Our statue would have occupied the right side of this ensemble, the rider having the wall to his right, corresponding to the other statue, whose rider would have been turned to his right, with the wall to his left. Another possibility is that the two statues were placed parallel to each other on either side of an entrance or passage.

A comparable arrangement, but with animals *passant* instead of rearing, is offered by a pair of bronzes in high relief, meant to be attached to a wall, representing the Dioscuri, each riding a lioness, which were found during the

<sup>21</sup> "Note," 5. See, however, the photographs, for instance, pl. x in Richter, *Catalogue*, and especially fig. 3 of my article "Notes sur le cheval."

<sup>22</sup> This is a part of the horse that suffered little damage; cf. Richter, *Catalogue*, 28, and the photograph, taken before restoration, in my "Notes sur le cheval," fig. 5.

<sup>23</sup> Illustrated, for instance, in von Roques de Maumont, *op. cit.*, fig. 11, and in my "Notes sur le cheval," fig. 6. A similar marble statue (of Commodus?) in the Vatican is reproduced in von Roques de Maumont, fig. 30.

<sup>24</sup> But note that the rider of a statue in the British Museum (Caligula? cf. von Roques de Maumont, *op. cit.*, fig. 26) holds the reins in the right hand and a weapon (?) in the *left* hand.

American excavation in Timna', South Arabia.<sup>25</sup> Both of these figures, however, hold a spear in their *right* hand, and a chain serving as a bridle in their left.

The reliefs from Timna' also provide us, I think, with a ready explanation for the frontal dissymmetry of the Dumbarton Oaks horse. The latter appears *to be a conscious transposition in sculpture in the round of the style used for certain high reliefs* such as those from Timna', where the parts in the foreground are in exaggerated high relief as compared to those in the middle ground which are rendered in low relief.

#### THE LEGS AND THE HOOFS

Miss Pirenne<sup>26</sup> compares the parallel position of the forelegs of the Dumbarton Oaks horse to a conventional way of rendering the gallop as found in general in Greek art of the sixth to the early fifth century B.C. This representation of the gallop with parallel forelegs then disappeared in Greek sculpture, and around the middle of the fifth century was replaced by a different graphic convention, in which the galloping horse was shown with one foreleg raised above the other. Besides, the posture of the head and the position of the ears are that of a rearing, rather than galloping, horse. Moreover, since the flat parts of the hoofs are not on the same plane—as would be expected if the forelegs were originally parallel—there seems to be some error in the restoration of the forelegs, which were found broken in several fragments. No valid conclusion, therefore, can be drawn from their present position.

The soles of the hoofs of the forelegs are realistically rendered and they are not shod. The hoofs of the hindlegs nearly touch the present pedestal, thus their soles cannot be examined. They certainly had a flat surface<sup>27</sup> pierced by a square or rectangular cavity for receiving the mortise for a tenon fixing the statue to its pedestal. Miss S. Boyd, Assistant Curator, was able to distinguish one of these holes on an original photograph of the fragments before restoration.<sup>28</sup> The same feature appears, according to P. Costa, Adviser on Archaeology to the Yemen Arab Republic,<sup>29</sup> on a fragment of the hindleg of a horse in the Yemen Museum in Sanaa (quite similar to the hindlegs of the Dumbarton Oaks horse) which was found in 1931, together with another hoof, in Ghaymān, about 15 km. south of Sanaa.<sup>30</sup>

<sup>25</sup> Cf. Berta Segall, "The Lion-Riders from Timna'," in R. Le Baron Bowen and F. P. Albright, *Archaeological Discoveries in South Arabia*, Publications of the American Foundation for the Study of Man, II (Baltimore, 1958), 155–78. The right-side relief is also reproduced in my "Notes sur le cheval," fig. 7.

<sup>26</sup> "La Grèce et Saba" (see note 6 *supra*), 152.

<sup>27</sup> I first thought that the hoofs of the hindlegs were shod because of the presence, on the left side of the left hoof, of what might be a representation of a nail head; cf. my "Notes sur le cheval," 62 and fig. 1.

<sup>28</sup> Personal letter of February 7, 1973. This detail cannot be distinguished on the rather poor copy of the same photograph which I published in "Notes sur le cheval," fig. 5.

<sup>29</sup> Personal letter of June 18, 1973.

<sup>30</sup> Museum no. YM 208. Already mentioned by Grohmann, *op. cit.* (*supra*, note 7), 236, and in my article "L'apparition du cheval," 213. A photograph of this fragment and of the other hoof is given by W. Radt, *Katalog der staatlichen Antikenversammlung von Šan'ā' und anderer Antiken im Jemen*, Deutsches Archäologisches Institut (Berlin, 1973), no. 78, pl. 31. See also P. Costa, "Note su alcuni pezzi del Museo Nazionale dello Yemen a Šan'a," *Annali dell'Istituto Universitario Orientale di Napoli*, N.S., 24 (1974), 287–89.

## OTHER SOUTH ARABIAN BRONZE STATUES

The donor of the Dumbarton Oaks statue (see inscription A) calls himself chief of the tribe of Ghaymān. It could well be that the fragments in Sanaa belonged to the companion of our horse, and that it was the news of the discovery of a bronze horse in Ghaymān (?) around 1929 that led to the "excavations" on the same site in 1931 which resulted in the discovery of the fragments now in the Yemen Museum. The fragment in Sanaa seems to be treated in a more naturalistic fashion: the chestnut, for instance, is clearly represented on it. Corrosion, and subsequent cleaning, may have been more severe in the Dumbarton Oaks horse, causing the disappearance of some surface details.

Other excavations south of Ghaymān brought to light a bronze hollow-cast statue of a nude standing man, about 2.40 m. high, as well as fragments of a similar statue, all now in the Yemen Museum.<sup>31</sup> The preserved statue bears an inscription,<sup>32</sup> which also mentions a pair. These figures are examples of a long tradition of bronzes of large or medium size, cast locally in various techniques. They represent men (gods?), women, cupids, and large animals such as lions and griffins; of most of them only fragments are known.<sup>33</sup> A South Arabian inscription of the fifth century A.D.<sup>34</sup> mentions that bronze statues of bulls, lions, ibexes, and panthers were set up in a palace. The tenth-century Arab historian al-Hamdānī<sup>35</sup> quotes certain traditions according to which bronze statues of lions and eagles adorned the four corners of the upper story of Ghumdān, the palace of the pre-Islamic kings of Himyar in Sanaa.

From the evidence provided by classical authors and epigraphical sources, the horse, which had been known for centuries in North Arabia, does not seem to have been introduced into the high plateau of Yemen before the second century A.D.<sup>36</sup> Strabo still notes its absence in that country in his time,<sup>37</sup> while the anonymous *Periplus of the Erythraean Sea* mentions the importation of horses and mules for the South Arabian kings.<sup>38</sup> It should be noted, in this connection,

<sup>31</sup> Cf. C. Rathjens, *Sabaeica*, II, Mitteilungen aus dem Museum für Völkerkunde in Hamburg, XXIV (Hamburg, 1955), 102–5, photo nos. 394–96; Radt, *op. cit.*, nos. 70–73, pls. 25–29. These fragments were found in Nakhlet el-Ḥamrā, approximately 25 km. south of Ghaymān.

<sup>32</sup> Published by G. Ryckmans, "Inscriptions sud-arabes, Quatrième Série," *Le Muséon*, 50 (1937), 255–56, no. 179; *Répertoire d'Épigraphie Sémitique* (Paris, 1950), VII (hereafter, *RES*), no. 4708.

<sup>33</sup> Cf. the survey in Grohmann, *op. cit.*, 234–38, and Radt, *op. cit.*, nos. 70–86, pls. 25–33.

<sup>34</sup> Cf. G. Garbini, "Una nuova iscrizione di Šaraḥbi'il Ya'fur," *Annali dell'Istituto Univ. Orient. di Napoli*, N. S., 19 (1969), 559–66. According to W. W. Müller, in a personal communication, a hitherto unsuspected mention of the setting up of a bronze statue of a lion should be read in the inscription Fakhry 74, 2 (published by G. Ryckmans, *Epigraphical Texts*, in A. Fakhry, *An Archaeological Journey to Yemen*, II [Cairo, 1952], 46–47).

<sup>35</sup> Al-Ḥasan ibn Aḥmad al-Hamdānī, *Al-Iklīl (Al-Juz'al-Thāmin)*, ed. N. A. Faris, Princeton Oriental Texts, VII (Princeton, 1940), 13, 18; cf. the translation by N. A. Faris, *The Antiquities of South Arabia*, Princeton Oriental Texts, III (Princeton, 1938), 15, 17–18.

<sup>36</sup> Cf. my article "L'apparition du cheval," 212–14.

<sup>37</sup> *Geogr.*, XVI, 4.2.

<sup>38</sup> Ed. H. J. Frisk, in *Göteborgs Högskolas Årsskrift*, XXXIII, 1927; 1 (Göteborg, 1927), §§ 24, 28; cf. W. H. Schoff's translation (New York, 1912, repr. New Delhi, 1974), 31, 33. This work is now dated to the late 2nd–early 3rd century A.D.; see, for instance, J. Pirenne, *Le royaume sudarabe de Qatabān*, 200; *idem*, "Un problème-clé pour la chronologie de l'Orient: la date du 'Périple de la Mer Erythrée,'" *JA* (1961), 454; F. Altheim, *Geschichte der Hunnen*, V (Berlin, 1962), 15; H. von Wissmann, *Sammlung Eduard Glaser III, Zur Geschichte und Archäologie von Alt-Südarabien*, SBWien, Phil.-Hist. Kl., 246 (Vienna, 1964), 72.



that the Dumbarton Oaks horse does not appear to belong to the North Arabian breed. The archaeological and epigraphical evidence consists mostly of votive bronze statues of horses, horsemen, or mules, frequently bearing a short dedicatory inscription, usually to the goddess dāt-Ba'dān.<sup>39</sup> Horses and mules are mentioned either in texts as votive gifts in the form of statues, or in historical reports of military operations involving horsemen. These documents cannot be dated before the second century A.D. By the beginning of the third century, horsemen are commonly mentioned in military operations.

I believe I have identified Raḥ'il Ašwa', the father of the donor who is mentioned in our inscription A, in an inscription in stone, the lettering of which can be dated to around the middle of the second century A.D.<sup>40</sup> This would give a date around the end of the same century for the dedication made by his son Hawf'atāt. At that time, in the Roman Empire, equestrian statues were reserved in Rome for the emperor, while in the provinces they were a privilege of the class of knights.<sup>41</sup> The author of the dedication was the head of an important tribe, which would explain his offering of an equestrian statue, probably intended to represent himself.

#### ORNAMENTAL MOTIFS

The straps of the collar and girth, as well as the edge of the saddle cloth, represented in relief, bear an engraved ornamentation of running spirals and a wavy motif with ivy leaves and berries. G. M. A. Richter describes them, remarking that the latter occurs in the classical world from late Greek times throughout the Roman period.<sup>42</sup> In my opinion the running spiral, which Miss Pirenne has cited as a typical Greek ornament in support of an early date for the horse,<sup>43</sup> is also a motif which was used for a long time in various places outside Greece and, therefore, cannot serve to establish a date, particularly an early one.

#### ANALYSIS OF THE BRONZE ALLOY

A spectrographic analysis<sup>44</sup> was made in July 1972 by M. E. Salmon and H. Westley at the Conservation-Analytical Laboratory of the United States National Museum, at the request of W. T. Chase, Head Conservator at the

<sup>39</sup> Cf. my articles "L'apparition du cheval," 213-14, and "Notes sur le cheval," 46, for a survey of several such statues. The equestrian statuette Istanbul No. 7620, cited in "L'apparition du cheval," 214 note 1, turns out to be a forgery. A horse with rider appears on a bronze medal published by A. H. Sharafaddin, *Ta'riḥ al-Yaman al-Taḡāfi* (Cairo, 1967/1387 H.), II, 126 fig. 139. A bronze relief of a horse with rider in the Museum für Völkerkunde in Hamburg is represented there on p. 131, pl. 151. In "Notes sur le cheval," fig. 4, I reproduced a small bronze horse with inscription in the Cincinnati Art Museum.

<sup>40</sup> The text is published in *CIS*, pt. IV, *Inscriptiones Himyariticas...continens*, no. 57; cf. "L'apparition du cheval," 218-19.

<sup>41</sup> Von Roques de Maumont, *op. cit.*, 47.

<sup>42</sup> *Catalogue* (*supra*, note 2), 26-28.

<sup>43</sup> "La Grèce et Saba," 153.

<sup>44</sup> In the dossier of the D. O. Collection.

Freer Gallery of Art Laboratory, on samples taken respectively from the top of the right nostril (one pellet cut into two fragments analyzed separately), from the area of inscription B (two pellets analyzed together [see fig. 6a, center]), and from the raised border of the saddle cloth, near inscription A (fig. 6a, upper left). The metal percentages of the samples from the saddle cloth and from inscription B are very similar: lead, 6 to 8%; tin, 3.5 to 5.5%, and copper from around 80 to around 84% (making up 94% of the analyzed samples). On the other hand, the sample from the nostril shows lower copper (74%) and tin (2.3%) percentages, but a greater proportion of lead (about 18%). The difference in the lead percentage might be explained, as Mr. Chase suggests in a letter attached to the report, by a process of segregation of the lead in the alloy. The nostril occupies in fact the bottom of the cast section comprising the head and the neck. Besides, in ancient bronze statues the lead percentage may be higher in patinated than in non-patinated areas of the surface, because of a greater enrichment due to a different dissolution in the ground of the oxidation compounds of the alloy.<sup>45</sup> As the head is the part of the horse that is best preserved, its patina is probably original, whereas this is certainly not the case in such heavily restored areas as those of inscriptions A and B. Moreover, as I. Vandevivere remarks, the section comprising the head and neck being cast separately from the forequarters, appreciable differences may have occurred in the composition of the alloy. The latter generally comprised a basis of remolten scraps in indeterminate proportions, so that there could be notable differences between various pieces produced in the same workshop.

These results must, of course, be handled with some caution. At any rate, the relatively large lead content excludes an early date for the statue and for inscription B, since lead enters into the composition of Greek bronzes in the proportion of more than one or two percent only from the Hellenistic period onward,<sup>46</sup> and there is no reason to suppose that South Arabian production, which ultimately derived from Greek models, did not conform to this rule. The similarity between the alloy of inscription B and that of the area of inscription A at least indicates the same workshop tradition, even though this does not necessarily imply the same date for the two.

The alloy of our horse is quite different from that of the bronzes of Timna'.<sup>47</sup> On the other hand, the percentages of the sample taken from the nostril of the horse are remarkably close to those of a bronze fragment in the Yemen Museum in Sanaa, described as a lion's jaw.<sup>48</sup>

<sup>45</sup> Cf. R. Cesareo, S. Sciuti, and M. Marabelli, "Non-destructive Analysis of Ancient Bronzes," *Studies in Conservation*, 18 (1973), 75.

<sup>46</sup> Cf. E. R. Caley, "Chemical Composition of Greek and Roman Statuary Bronzes," in *Art and Technology, A Symposium on Classical Bronzes*, eds. S. Doeringer, D. C. Mitten, and E. Steinberg (Cambridge, Mass., 1970), 40.

<sup>47</sup> Cf. J. Ternbach, "Restorer's Report on Lions and Riders of Timna'," in Le Baron Bowen and Albright, *op. cit.* (*supra*, note 25), 181-82.

<sup>48</sup> Cu, 76.2%; Pb, 17.0%; Sn, 6.8%; cf. Cesareo *et al.*, *op. cit.*, 75. Could this be a fragment of a gargoyle in the form of a lion's head from Huqqa (Grohmann, *op. cit.*, 236)? However, recent descriptions of the Museum do not mention this piece. I suspect that a "lion's paw" is meant; cf. the paws of griffins in Radt, *op. cit.* (*supra*, note 30), no. 77, pl. 30, with a parallel in Rathjens, *op. cit.* (*supra*, note 31), 256 and photographs nos. 451-52.

## GENERAL REMARKS ON THE INSCRIPTIONS

## INSCRIPTION A

Jamme's latest statement<sup>49</sup> that inscription A is not engraved but cast with the statue is based on the study of the tracing of the characters of the text, which he considers to be quite similar to that of certain details of the horse and of its harness, which he obviously assumes to be cast. Such a statement is quite startling, since in large bronzes fine details of that kind are, as a rule, chiseled after the polishing of the piece.

Professor Vandevivere, to whom excellent detailed photographs were submitted, categorically denies that inscription A is cast.<sup>50</sup> He remarks the following:

The tracing of the text is particularly thin and small considering the size of the cast element [the forequarters] on which it is written. The sharpness of the tracing is of course an essential quality for the legibility of such an inscription. Now, wax, because of its softness, would attenuate the edges of the groove, while a further loss of sharpness would result from the casting itself and the polishing of the piece. This explains why, save for regional and short-lived exceptions, this kind of detail on pieces of similar size has always been executed by engraving after polishing.

The examination of the actual tracing proves that—as would be expected—the technique of engraving was indeed used. Had the letters been traced in wax, the tool used would have been a punch with rounded end, as in fact it shows in the groove; but the penetration of such a tool into the wax would have caused the edges to protrude. Moreover, the tracing would have been more effortless and continuous, due to the pressure and the softness of the material. Now, in spite of the corrosion, the characters stand out with clear-cut edges, giving evidence of the resistance of the material. The hardness of the bronze explains the indented edges and the irregular depth of the groove (fig. 5b) which resulted from the slow progress of the chisel removing chips of metal. A certain graphic stiffness (slightly angular curves, as in fig. 5b) and obvious deviations of the chisel (fig. 5c) also allow us to conclude that the engraving was done directly in the metal, not in wax. Since no retouching is apparent in the lines, the use of another possible technique—that of retracing in the bronze itself the details previously engraved in wax and then cast—is also excluded. . . .

The same technique of engraving with a chisel was used for the tracing of the graphic ornamentation of the horse. This is particularly apparent on the girth, where the curved surface has made the tracing more difficult: for instance, the chisel has repeatedly deviated from the intended parallel course of the lines in the wave pattern (fig. 5a). Corrosion has evidently attenuated the fineness and the lively appearance of these motifs, which, by having been cut directly in the bronze, originally must have stood out quite sharply.

These convincing observations remove the physical link which Jamme thought he had established between inscription A and the casting of the horse, but prove to be of little practical value for the relative chronology, since even Miss Pirenne now no longer maintains that the casting of the statue had no connection with its offering mentioned in inscription A.<sup>51</sup>

The restitution of inscription A by Jamme presents several serious errors of a general nature which impair the credibility of his overall interpretation and

<sup>49</sup> "Note," 6.

<sup>50</sup> Personal communication.

<sup>51</sup> In a personal communication of Jan. 30, 1973, she expresses the view that the statue was cast about A.D. 200.

dating, and must, therefore, be examined in some detail. On the right-hand side more than one third of the inscription (the beginning of lines 4–10 and part of the beginning of line 3) is missing. On the left-hand side, at least one quarter of the text has disappeared, at the end of lines 6 to 10. Jamme restores these lacunae in their entirety (fig. 3a) on the basis of a meticulous estimate of the exact number of missing signs. Such accuracy—and consequently the credibility of the restorations exactly filling the assumed gaps—proves, however, to be quite fallacious. A first glance at the irregular lines of the inscription, restored from many fragments, already shows that the piecing together was done without much care. Slight deviations from the correct alignment or orientation of a fragment can have combined effects making a precise evaluation of the gaps quite impossible.

In the first place, the right margin of the text is restored by Jamme along a curved line quite arbitrarily traced, which already impairs the accurate evaluation of the width of the lacunae to be filled at the beginning of lines 4 to 10.

Secondly, the position of the central fragment of lines 1 to 5 is lower and further to the right than it originally had been, as the downward shifting of the upper lines on the fragment shows. The fragment should be moved up and more to the left in order to fall again into the line pattern of the rest of the inscription. Such a shifting, to which a slight clockwise pivoting must be added, would create an empty space that could contain at least one character (and probably more for the last line) to be supplemented in the lacuna at the beginning of each of lines 3 to 10.<sup>52</sup> The restitution of the divine name *Rahmānān* in line 3, considered certain by Jamme because it is the only South Arabian name of a god which would fill exactly the calculated lacunae  $[xxx]n[x]$ , does not take into account this shifting and, therefore, is *certainly not* correct, since the lacuna is undoubtedly broader. Consequently, Jamme is deprived of any basis for the only argument he can advance in favor of a date not earlier than the fourth century A.D. for both inscription A and the horse.

Still a third mistake, in line 10, must be added to the preceding ones. At about the middle of this line, only two letters, spaced 31.5 mm. apart, are legible (fig. 3b). The bronze around these letters is smooth and patinated, and shows no trace of any missing signs.<sup>53</sup> This line might have been erased by rubbing if the statue had stood in an accessible place; however, in my opinion, it is more likely that its present state is the original one, and that the line—the last of the text—contained only four or five letters, evenly spaced in order to make it end at the same margin as the preceding ones. This is not exceptional in South Arabian epigraphy.<sup>54</sup> Around the only two extant

<sup>52</sup> See fig. 9 in my "Notes sur le cheval."

<sup>53</sup> This is quite in agreement with Miss Day's copy. In Jamme's facsimile ("Inscriptions," figs. 40 and 41, the latter reproduced here, fig. 3a), the whole space left and right of both letters is taken to be an obliterated portion of the text.

<sup>54</sup> Cf., for instance, J. H. Mordtmann and E. Mittwoch, "Altsüdarabische Inschriften," *Orientalia*, 1 (1932), 24–26, no. 1 (= *RES*, no. 4094); Ray L. Cleveland, *An Ancient South Arabian Necropolis, Objects from the Second Campaign (1951) in the Timna' Cemetery*, Publ. Amer. Found. for the Study of Man, IV (Baltimore, 1965), 158 and pl. 102 (= TC no. 1131; see A. Jamme, *Notes on the Inscribed Objects Excavated at Heid bin 'Aqil in 1950–1951* [Washington, D. C., 1965], 45).

characters Jamme reconstructs a whole line of not less than twenty-seven characters, including a formula, "[By the G]o[d, this of the hea]v[en and the earth," which has no attested parallel in South Arabian inscriptions. This restoration—evidently influenced by the restoration of the name of the Christian God in line 3—is justified by Jamme on the grounds that it fits exactly the available space, particularly the precisely calculated width of four spaces between the two preserved letters. But this evaluation rests on a physical mistake: in Jamme's facsimile, the left extant character is placed one space too far to the left (fig. 3a).<sup>55</sup> The actual space between both letters leaves room for three characters only instead of four, which makes the entire proposed restitution impossible. To this must still be added the accumulated errors in the evaluation of the lacunae, based on the arbitrary restoration of the margin, and the incorrect placement of the central fragment of lines 1 to 5, so that the proposed reading of line 10 can be considered to have absolutely no foundation.

The lettering of inscription A is difficult to date, being one of the very few extant examples of a script engraved on bronze. Jamme's late dating of it is completely influenced by his monotheistic restitution, and is not based on any convincing palaeographic argument. My own dating of it (see *supra*, p. 289) to the end of the second century A.D. rests, in addition to internal evidence, on a palaeographic argument concerning characters *t* and *f* in the text. The *t* is similar to our letter "x", except that the serifs are perpendicular to the shafts of the letter (fig. 4d). This form is typical of the second-third centuries,<sup>56</sup> and later is generally replaced by a form in which the serifs are parallel to the written line, as they are in the case of our letter "x". The form of the *f* in the text—essentially a lozenge with elongated tips along the vertical axis (fig. 4c)<sup>57</sup>—is derived from the ancient form, but definitively disappears in the late third century,<sup>58</sup> when it is replaced by a form in which a small lozenge is incorporated into a vertical shaft with horizontal serifs at both ends (fig. 4c). I must point out here that some elaborate forms of characters in Jamme's facsimile do not correspond to the actual aspect of the characters in the inscription itself (fig. 4e).

#### INSCRIPTION B

Jamme is definitely right in considering inscription B a *patch* added to fill up a hole in the horse: the whole space around it bears traces of soldering, filing, heterogeneous fillings, etc. (fig. 6a). X rays of this area unfortunately are obscured by the lead used to fix the inner frame which holds the restored statue together.

<sup>55</sup> See my restoration of the letter to the position it must have occupied in the original, in my "Notes sur le cheval," fig. 9 B.

<sup>56</sup> Cf. J. Pirenne, "De la chronologie des inscriptions sud-arabes après la fouille du temple de Mârib (1951-1952)," *BO*, 26 (1969), 308 and fig. 5, pl. x.

<sup>57</sup> But here with two features apparently borrowed from the cursive script: a bar inside the lozenge, and the upper two oblique strokes extended downward.

<sup>58</sup> Cf. J. Pirenne, "A Palaeographical Chronology of the Sabaeen-Dated Inscriptions with Reference to Several Eras," *Proceedings of the Seminar for Arabian Studies*, 4 (London, 1974), 123, table II.

Jamme's further contention that this fragment does not belong to the statue is less evident, since apparently the alloy of both is practically identical. In reaction to Jamme's claim, the art dealer Joseph Brummer remarked: "When I removed the red and green copper oxide which covered the metal, the formation was exactly the same on the inscription as on the horse. . . , which proves that the inscription was not added after the bronze was buried."<sup>59</sup> This might mean only that the fragment was found in the same archaeological context as the horse. However, Brummer's statement might also be taken to indicate that before the restoration inscription B already occupied its present position; in other words, that it was soldered in this position in ancient times. *This, however, is definitely not the case.* After a lengthy scrutiny of two poor photographs of the fragments before the restoration, I was able for the first time to identify the fragment bearing inscription B, thanks to some details of the outline and to the faintly distinguishable letters in raised relief (fig. 6c). In spite of some distortion due to perspective, I am absolutely certain<sup>60</sup> that before the restoration the fragment was somewhat larger than its present size (fig. 6d). Consequently, the fragment *must have been reduced* by the restorer in the process of soldering it in its present position, which it certainly could not have occupied previously.

The archaeological connection of the inscription with the horse, and the close similarity of the alloy of both, are yet to be explained. The particularly flat relief of the fragment, which does not present the normal rounded forms of bronze inscriptions cast in raised relief, was very puzzling. Vandevivere gives a satisfactory explanation for this peculiarity by affirming, in contrast to all previous views, that inscription B was not cast, *but chased in the metal* in a *champlevé* technique. This explains, too, the irregular and jagged edge of some letters (fig. 6b), while the very clumsy execution may partly account for the archaizing appearance of the lettering. The text somehow gives the impression of reproducing an inscription in low relief in some flat material. This is due to the presence of a background with light yellow dots, as if the artist had tried to imitate an inscription in raised relief on gilded leather. The possibility that the fragment might bear traces of real gilding<sup>61</sup> occurred to me only after I left Washington, but Miss Boyd, who kindly checked this point for me, thinks, rather, that these particles represent "the original bronze showing through the corrosion."<sup>62</sup> In any case one strong possibility is that the text belongs to an inscription—a name—chased on a part of the harness (for instance, on the missing front part of the collar of the horse), or on a strap from some kind of arm carried by its rider or by the rider of a companion statue.

<sup>59</sup> Letter in the dossier of the Dumbarton Oaks Collection.

<sup>60</sup> As I made sure by projecting a slide of the fragment obliquely on a screen to correct the distortion due to perspective.

<sup>61</sup> This would not be unusual; most of the fragments of Roman gilded bronze statues from Morocco belong to equestrian statues; cf. Boube-Piccot, *op. cit.* (*supra*, note 19), *Texte*, 29, 51. The difficulty is that no other trace of gilding appears elsewhere on the surface of our horse.

<sup>62</sup> Personal letter of February 26, 1973.

On the other hand, there can be no doubt that, as Miss Pirenne affirmed after examining the photographs,<sup>63</sup> the marks to the right of the text, which Jamme in his edition considers the left part of a letter *f* followed by a word divider (fig. 3a), are simply part of a flaw in the bronze surface. This irregularity also crosses the space between the border on the right and the first letter, and lies on top of and outside the depression within which the letters stand out in raised relief; it can be followed further upward and to the right on the photograph of the fragment before its restoration (fig. 6c), but it was filed off with part of the fragment when the restorer soldered the latter into its present position.

#### INSCRIPTION C

The text is written obliquely on the left side of the rump, from 7 cm. at the beginning to 4 cm. at the end of the text behind the rear border of the saddle-cloth, as if the engraver had sat astride the horse, where the rider would have sat, but facing in the opposite direction. In fact, it hardly seems possible that the text could and would have been written where it is now had the rider still been in place. This is in agreement with the clumsy aspect of the text, and with its chronology, if we assume that the text was written in the monotheistic period at the time of the looting of the pagan temple where the statue had been donated.

The first letters of the inscription (beginning from the right) are very coarsely engraved in short, more or less juxtaposed incisions. The technique improves somewhat in the rest of the text but even the last letters are, on the whole, very poorly engraved. Apart from obvious palaeographical differences, plain common sense makes it absolutely impossible to agree with Jamme's view that this quite clumsy and haphazard graffito is the signature of the competent engraver who wrote inscription A.

The more salient palaeographical feature of the text—after the peculiar shape of the letter *m* with open ends—seems to be the form of the serifs of the letters *alif* and *h*, which are attached only to one side, the outer one, of the strokes, while the lower end of the shaft of the *h* has a normal serif extending in both directions (fig. 4a). A similar but not quite identical form, together with the barred *b* of our text, is found only in Ja 2356 (fig. 4b),<sup>64</sup> an inscription dated to the year "345." Unfortunately, the era in question is not identified. It cannot be the Himyaritic era, which would give a date around A.D. 230 for this particular text, because the text contains a monotheistic name, *Mrid'ln*, "devoted to God," which clearly cannot precede the first appearance in inscriptions of the monotheistic creeds in South Arabia in the second half of the fourth century. Miss Pirenne<sup>65</sup> dates Ja 2356 (independently of inscription C) to the seventh century, on palaeographic arguments, which are not quite convincing. But she had previously dated our text C to the early fifth century. I

<sup>63</sup> *Paléographie*, I, 269; cf. Jamme, "Note," 8.

<sup>64</sup> A. Jamme, *Miscellanées d'ancien (sic) arabe*, II (Washington, D. C., 1971), 89–90.

<sup>65</sup> "A Palaeographical Chronology," 122 and 123, table II.

would prefer this latter date, on the basis of an internal argument: if, as it seems most likely, the inscription was written when the pagan temple in which the statue stood was looted, then it seems probable that this occurred shortly after the establishment of monotheism in South Arabia, rather than three centuries later.

## PHILOLOGICAL COMMENTARY ON THE INSCRIPTIONS

## INSCRIPTION A (fig. 3b)

My reading of the text and my present facsimile are the result of a careful comparison of the original inscription with both Jamme's facsimile and my own previous reading, which I had made on the photograph published by Jamme.<sup>66</sup> Photographs of various parts of the text were used to check and draw many details. The measurements I took are the following: 90 mm. from the top of the word divider after *qwl* in line 1 to the bottom of *w* at the end of line 9; 103 mm. from the bottom of *h* in line 10 to the assumed position of the top of *alif* in *yh'dn* in line 1; and 31.5 mm. from the right edge of the *m* to the middle axis of the shaft of *h* in line 10. The relation between these measurements is not maintained in either my or Jamme's facsimiles, which use as a general basis a photograph taken from the right side. The scale given in my facsimile, therefore, corresponds to an average value, which is valid only for the central part of the text.

*Transcription:*

1. *hwf'tt* / *yh'ān* [ / *d*] *ġymn* / *qwl* / *š'*
2. *bn* / [ *ġ*] *[ymn* / ] *bn* [ / ] *rh'l* / ['] *šw'* / *d'm'dn* [*m* / *h*]
3. *q'n* [y / *d*t / *b'd*] *n[m]* [ / ] *frsy* [*nh*] [*n*] / *wrkbbhmy* / '
4. [*lyhmy* / [ / *d*y / *mā*] *qntn* / *d'm* *d'rhm* / *lwf*
5. [*yhw* / *wrfy*] / *w*] [*bh*] [*r* / ] [ *ġ*] *y'mn* / *w* [*kl*] / *d*
6. [*qny* / *wrfy*] [ / ] [*b*] [*y*] [*t*] *h'm* [*w* / ] *wql* [*hmw* / *w*.]
7. [ / ] [*w*] *fy* / *kl* / *d* [*qn*] *yw* / *w* [ / ]
8. [ / ] [*'bdh* / *hwf*] *'tt* / *rāw* / [*lbh* / [ / ]
9. [ / ] [*wl* / *yq'* / [ / ] *rh* [*m* / *w*] *š*] <*w*>
10. [*n*] [ / ] *h* *m* (*w*)

*Translation* (all important differences with Jamme's translation are italicized):

1. Hawf'atāt Yuha'din, [of the tribe] Ġaymān, head of the tri-
2. be Ġ[aymān], son(s?) of Raḥ'il [A]šwa' of dū-Ma'din<sup>m</sup>, has of-
3. [fered to *dāt-Ba'dā*] *n*<sup>m</sup> (?) these tw]o horses, and their two *riders on*
4. [them in the *san*]ctuary of Maḍraḥ<sup>m</sup>, for [his] prot-
5. [ection and the protection of and of the] *plai*[*n*] of Ġaymān and of [*all*]

<sup>66</sup> Cf. Jamme, "Inscriptions," fig. 42.



6. [he possesses, and the protection of ] their houses and  
[their] chiefs [and ]
7. [ the prot]ection of all they possess. And [so that *she* may]
8. [grant? to her servant Hawf]‘aṭat the favor of *her* heart [and ]
9. [ ] and that be humiliated [their] foe [and  
their e-]
10. [n]————[n]————e————m————(y)

*Commentary:*

Line 1. I restore *dġymn*, as does Miss Pirenne (in a personal communication). Jamme considers *ġymn* a second epithet of Hawf‘aṭat.

Line 2. Jamme (“Note,” p. 9) asserts that a fragment of a shaft, appearing under and slightly to the right of the upper part of *n* (in *bn*) belongs to that letter. But this fragment is too thin to be part of an *n*; moreover, the shifting of the central fragment of the text must evidently be greater in order to get the *d* (in *yh’dn*, line 1) clear of the knob of the buckle and on the same level as the remainder of line 1. One expects at least something like *bn y rh’l* or *bn yrh’l*—if not a considerably larger lacuna. This possibility makes the proposed restorations at the beginning of each line highly tentative.

Line 3. Miss Pirenne’s guess “*dat-Ba’dān<sup>m</sup>*,” a goddess, agrees with the use of the feminine pronominal suffix in *lbh* (line 8).

Lines 3–4. ‘[*lyhmy*: a very likely restoration; cf. Ja 708,5: *mtkħm w b’lyhw šlmm*, “a stone tablet [?] and on top of it a statue.”

Line 4. [*mā*] *qntn*: a well-known type of sanctuary.

Lines 4–5. *lwf[yhw]*: Jamme’s restoration *lwfyh*, with a feminine pronominal suffix, is incompatible with his translation “the protection of himself.”

Line 5. *w[kl/]d*: Jamme reads *w’bl/d* as partly legible: “and of the camels [he has].” I could see no trace of that word. An allusion to camel breeding in Ġaymān at the time the text was written is hardly to be expected.

Line 7. *kl d[qn]yw*: “all they possess.” This is no duplication of the request at the end of line 5, since here the subject is different: the *bayts* (clans) and chiefs of the tribes of Ġaymān.

Line 8. *lbh*: “her heart.” The word divider is only partly legible in the original, but appears clearly as a thin double stroke on a detailed photograph, so that a reading *lbh[mw]*, “their heart,” is impossible. Jamme gives no explanation for his translating the feminine pronominal suffix as masculine: “his [i.e., Raḥmānān’s] heart.”

Lines 9–10. The fragment bearing the last letter of line 9 (*w*) is in a restored area: I think that originally it was placed somewhat lower, and constituted the end of line 10. I consider the last five letters of the text (the last line in my restoration) to have been written more or less evenly spaced.

INSCRIPTION B (fig. 6a)

The photograph reproduced here is incomparably better than that published by Jamme in his article “Inscriptions,” fig. 38.

My reading of the word is *'h'm*, "Ah'am," which I believe to be a complete personal name of the type *af'al*, from a root *h'm* hitherto unattested. Jamme's contention that a fragment of a preceding word remains on the right side of the text led him to assume that the name is a compound—and therefore a man's name. Nothing prevents one from considering this single name to be that of the horse which may originally have appeared, for instance, on some part of its harness.

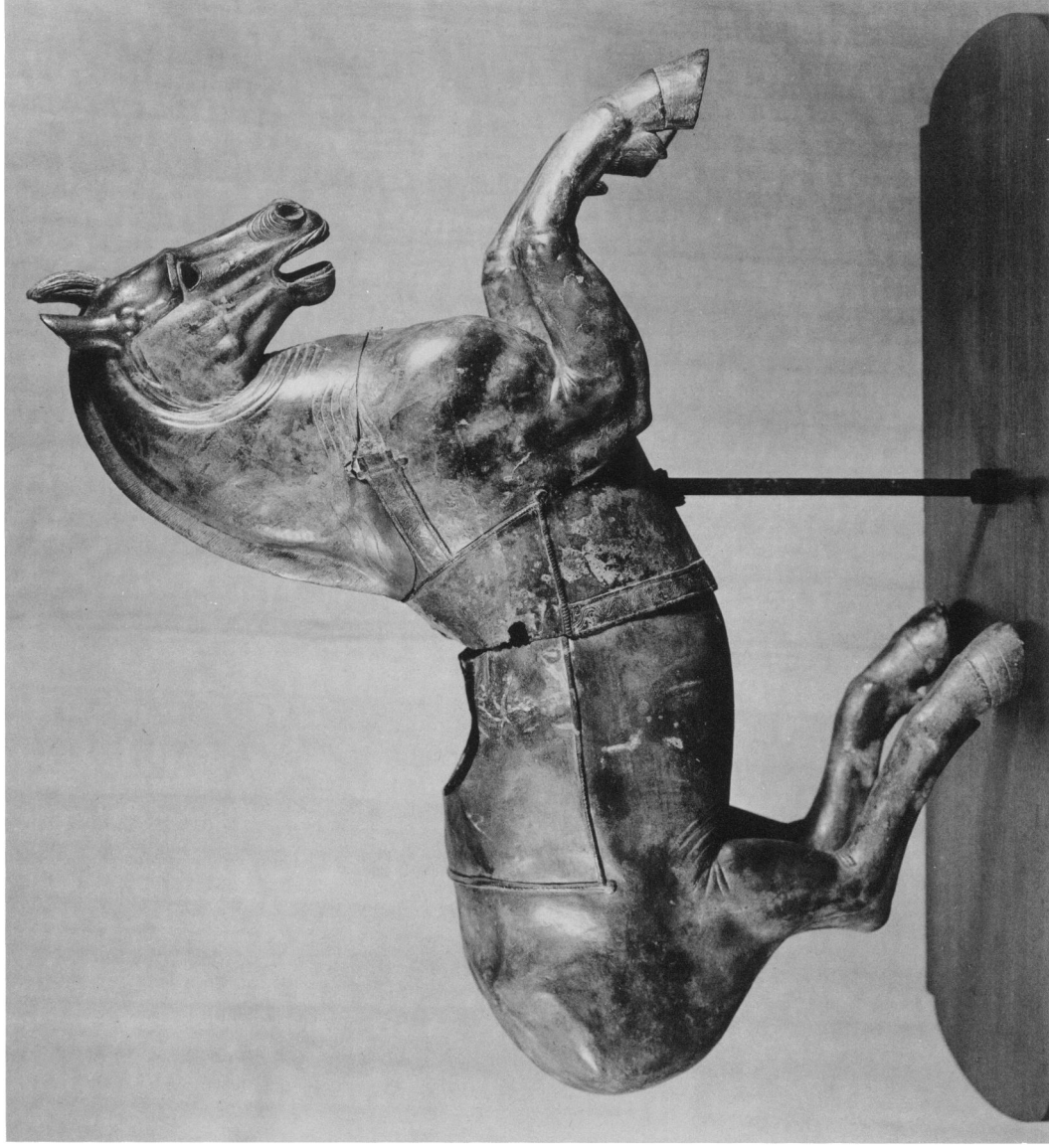
INSCRIPTION C (fig. 4a)

Thanks to detailed photographs, I was able to improve on the drawing of the letter *alif*. It is impossible to determine whether the restored positions of both halves of the remainder of the text around the lacuna respect the original arrangement.

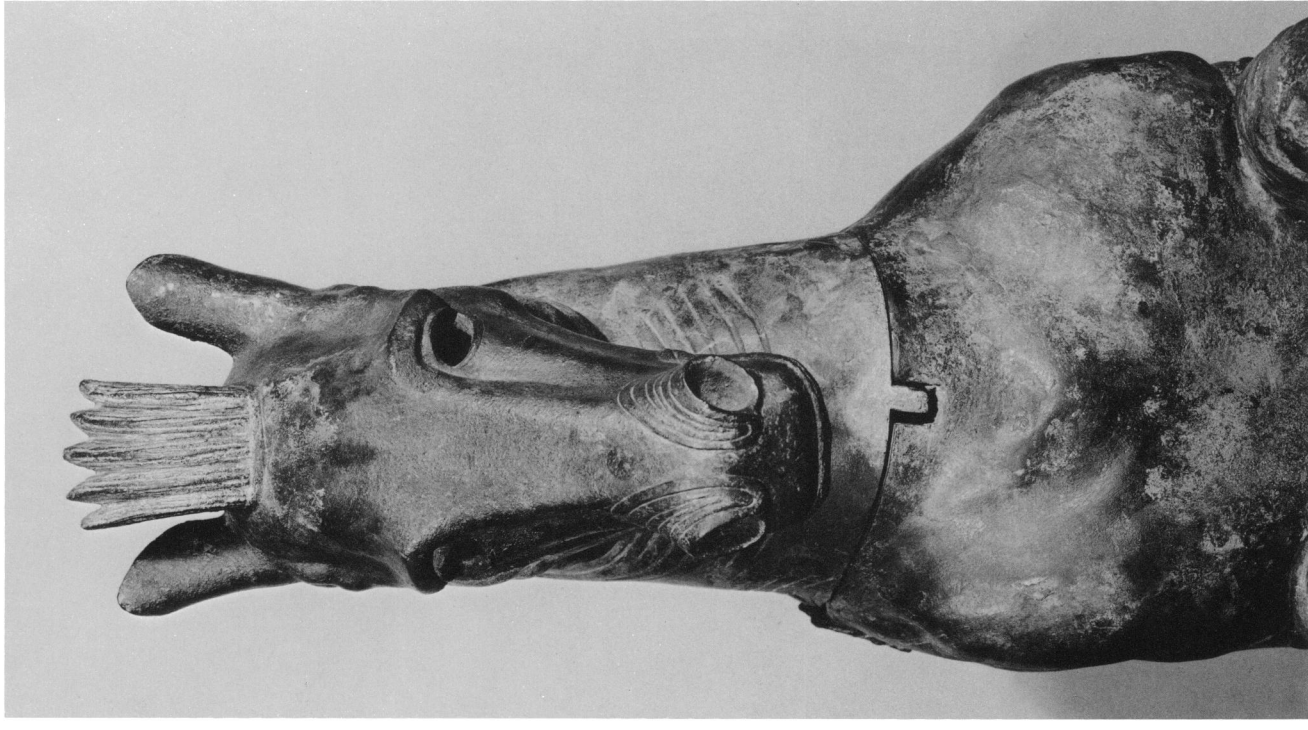
My reading is the same as that of Jamme:

*Šrḥb' l [ / ] [ d m ' h r*, "Šaraḥbi'il of (the tribe of) Ma'āhir."

Université Catholique de Louvain

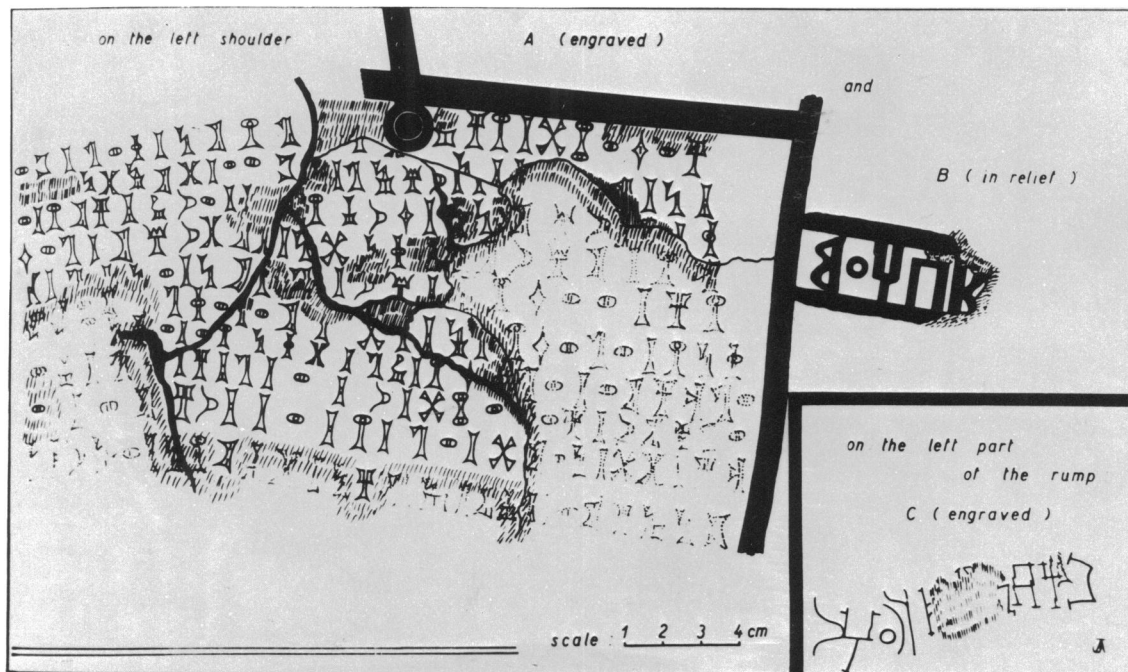


1. Right Profile

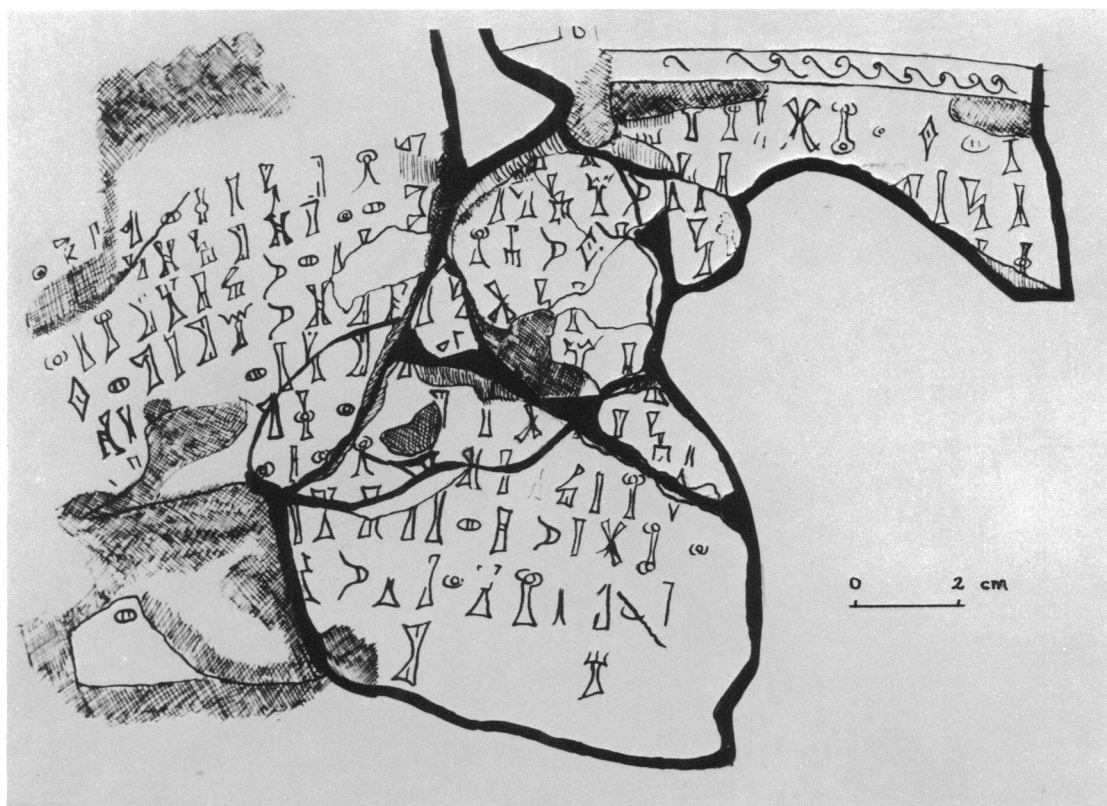


2. Frontal View, detail of Head and Forequarters

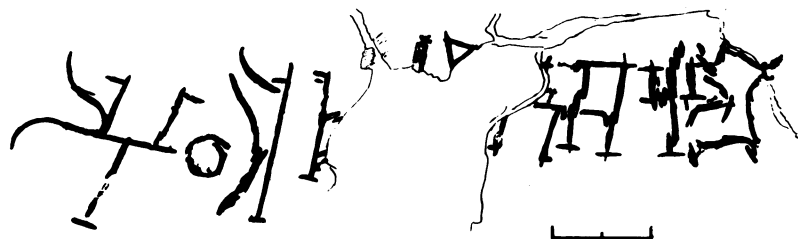
Dumbarton Oaks Collection. Sabaeen Bronze Horse



3a. Inscriptions, Jamme's Facsimile and Restoration



3b. Inscription A, Ryckmans' Facsimile. Cross-hatchings indicate Zones of False Patina



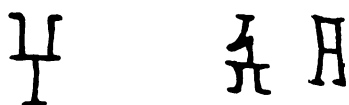
4a. Inscription C, Ryckmans' Facsimile



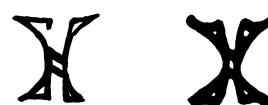
4c. Form of Letter *f*  
in Inscription A  
(Line 1, *hwf<sup>e</sup>tt*), and  
in Late Inscriptions



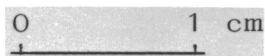
4d. Inscription A,  
Form of Letter *t*  
(Line 1, *hwf<sup>e</sup>tt*)



4b. Inscription Ja 2356,  
Similar Forms of Letters



4e. Inscription A, Form of  
Letter *d* (Line 2, First *d* in  
*dm'dn[m]*), Ryckmans' and  
Jamme's Facsimiles



5a. Deviations in Parallel Lines of  
Wave Pattern (Girth, Right Side)



5b. Irregular Depth of Groove  
and Angularity of Some Curves  
(Line 3, Letter *r* in *frsy[nhn]*)

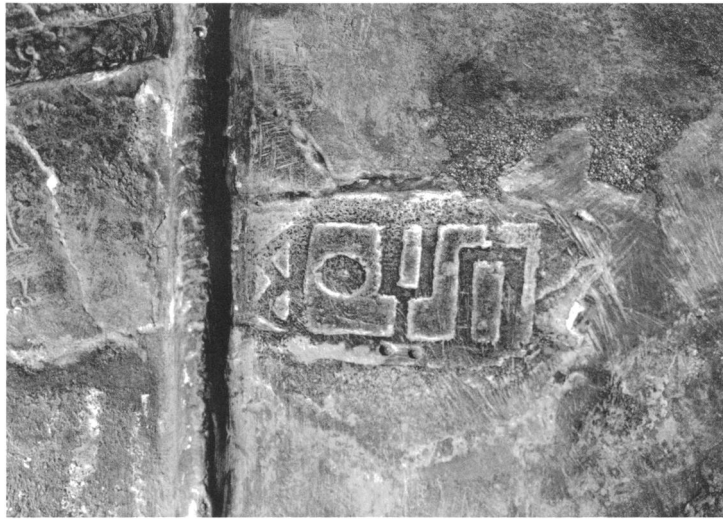


5c. Deviations (Line 4, Word-  
divider after *mdrhm*)

Inscription A, details

Evidence of Use of Chisel





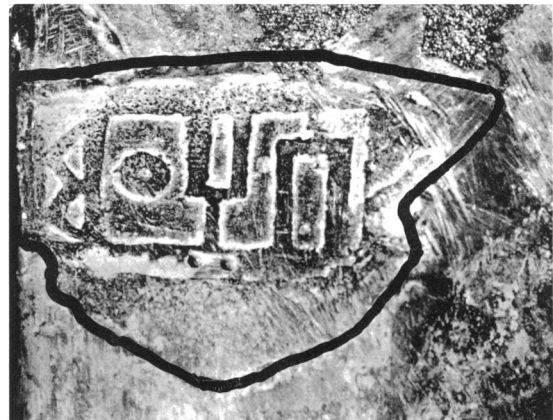
6a. General View, showing Gilded Appearance of Background. Left Side, First Letters of Lines 2 and 3 of Inscription A are visible



6b. Detail, showing Jagged Edges of Letters. Right Side, Indentation made by Chisel clearly visible inside Fork of Letter



6c. Fragment bearing Text, before Restoration



6d. Original Outline of Fragment, as compared to Present Appearance

Inscription B